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FOCUS

Communicating NCID's prevention and control programs for new and reemerging infectious diseases

Message from the Director

Dear Colleagues:

The International Emerging Infectious Diseases Conference is fast approaching. The conference, which will be held in Atlanta from March 8-11, 1998, has over 60 cosponsoring organizations. The program will offer new opportunities for education, collaboration, and partnership with colleagues from around the world as we explore the most current research, surveillance, and prevention and control approaches to all aspects of emerging infectious disease threats to human health.

An exciting program will feature a number of notable speakers, including Gail Cassell, Richard Feachem, Bill Foege, Laurie Garrett, D. A. Henderson, King Holmes, Joshua Lederberg, Barbara Murray, and Michael Osterholm. The presentations will address a broad range of topics such as foodborne diseases, antimicrobial resistance, infectious diseases transmitted by animals and arthropods, infections acquired in health care settings, infectious diseases in immunodeficient persons, and infectious causes of chronic diseases.

The deadline for abstracts on late-breaking topics is January 30. For additional information, contact the American Society for Microbiology (phone, 202-942-9248; E-mail, MeetingInfo@asmusa.org).

See you there!

James M. Hughes, M.D.

Focus on Bacterial and Mycotic Diseases

Meeting considers ABCs of surveillance

The Active Bacterial Core Surveillance (ABCS) project was the subject of intensive discussion on August 7 and 8, as surveillance officers from nine sites met at CDC to develop consensus on surveillance procedures for six bacterial pathogens: *Neisseria meningitidis*, *Haemophilus influenzae*, group A streptococci, group B streptococci, *Listeria monocytogenes*, and *Streptococcus pneumoniae*. ABCS is coordinated by Anne Schuchat and Katherine Robinson, Division of Bacterial and Mycotic Diseases; it consists of active surveillance for these pathogens in eight U.S. states and Canada, a total population of 32.1 million. The project is one component of NCID's Emerging Infections Program (EIP) and uses additional sites not included in the EIP.

Active surveillance involves seeking cases by any positive action, such as reviewing records and calling clinicians or laboratories to solicit reports; passive surveillance is simply receiving reports sent in without prompting. Surveillance workers contact hospitals and laboratories in their areas every 2 weeks to ensure complete and timely reporting. This can provide information crucial for understanding pathogenic organisms and the diseases they cause and for developing prevention measures. The purposes of the ABCS project are to 1) determine the incidence and epidemiologic characteristics of the six pathogens in the surveillance populations, 2) determine the relevant molecular and microbiologic characteristics of isolates submitted as part of the project and the proportion of drug-resistant pneumococcal isolates among the invasive strains,

First Row: Shama Desai, Mina Pattani, Katherine McCombs, GA; Bruce Hathaway, NY; Lisa Landry, ON; HwaGan Chang, NY; Nandeeni Mukerjee, CA; Anne Schuchat, CDC. Second Row: Matthew Phong, GA; Nancy Barrett, CT; Barbara Damaske, NY; Stephanie Nash, Ariane Kraus, CDC; Brenda Barnes, TN. Third Row: Sabrina Whitfield, Wendy Baughman, GA; Craig Morin, CT; Jean Rainbow, MN; Anna Satcher, Sara Sutandi, Katherine Robinson, Nancy Rosenstein, CDC. Fourth Row: Suzanne Segler, GA; Lillian Billmann, MD; Ellie Goldenberg, ON; Catherine Lexau, MN; Karen Stefonek, OR. Fifth Row: Stephen Ladd-Wilson, OR; Caroline Gilmore, TN; Gretchen Rothrock, CA.

continued on page 2

ABCs of surveillance – continued from page 1

and 3) gather information on which to base additional special studies.

Carrying out such extensive surveillance involves many different procedures, which must be standardized and coordinated if the data are to be used effectively. Variations in the pathogens themselves and in the medical communities comprising the different surveillance sites also must be considered.

According to Ms. Robinson, "Having surveillance officers participate in the August meeting was especially useful since they do the 'hands-on' work of implementing the protocol." During the 2 days, meeting participants agreed on case definitions and on detailed procedures for several aspects of data reporting, handling, transmission, and feedback.

Dr. Schuchat and Ms. Robinson noted that the close cooperation of the surveillance sites will increase the effectiveness of the ABCS project and the success of several special studies. Current and future projects arising from the ABCS project include studies of judicious antimicrobial use, group B streptococcus, and meningitis. ■

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Visit the National Center for Infectious Diseases on the World-Wide Web at http://www.cdc.gov/ncidod/ncid.htm

Focus on Hospital Infections

Project ICARE examines the relationship between antimicrobial use and resistance

The Hospital Infections Program and Rollins School of Public Health, Emory University, are conducting the first multicenter surveillance study of the use of antimicrobial agents and the relationship of this use to antimicrobial resistance in hospitals. Known as Project ICARE (Intensive Care Antimicrobial Resistance Epidemiology), the study began as a pilot program in 1994 and is preparing to enter its third phase.

Antimicrobial resistance is increasing worldwide and some pathogens are becoming untreatable. The goal of Project ICARE is to further the understanding of antimicrobial resistance and suggest measures for combating its spread.

Phase 1 piloted the surveillance system at eight hospitals, and Phase 2 expanded the surveillance to include 40 hospitals, each sending data from multiple intensive care units (ICUs) to HIP's National Nosocomial Infections Surveillance (NNIS) System. Phase 3, to be conducted at 50 hospitals, will provide data to help explain the complex relationship between the prevalence of antimicrobial resistance and the use of selected antimicrobial agents. All of the hospitals participate in the NNIS System.

A major finding from the recently completed Phase 2 was that those hospitals who had clinical practice guidelines for the use of antimicrobial agents prescribed less vancomycin than did those hospitals who did not have clinical practice guidelines.

Scott Fridkin, HIP, who is leading the analysis of the Phase 2 data, examined vancomycin use and antimicrobial control policies for 98 ICUs in 38 hospitals. "We found that, on average, ICUs with clinical practice guidelines for infectious diseases used an estimated 47% less vancomycin than did those hospitals without such guidelines," he said.

Phase 3 of Project ICARE will evaluate antimicrobial use and resistance in a larger number of hospitals and will collect information on traditional infection control measures, such as soap, glove, and gown use; frequency of clinical cultures; and interhospital transfer of patients.

Project ICARE will provide information to increase understanding of the relationship between antimicrobial use and resistance and strengthen surveillance for pathogens that become resistant to standard treatments. ■

HIP confirms first U.S. isolates of *S. aureus* with diminished susceptibility to vancomycin

The Hospital Infections Program has confirmed the first clinical isolates of *Staphylococcus aureus* with diminshed susceptibility to the glycopeptide vancomycin in the United States. The isolates were identified in one patient each in Michigan and New Jersey in July and August, respectively, and their discovery comes only weeks after the first clinical isolate of *S. aureus* with diminished susceptibility to vancomycin (SADV) was reported in Japan in July.

The HIP investigations in each state were led by Theresa Smith (EIS) and reported in detail in the *MMWR* (*MMWR* 1997;46:765-6, 813-15).

Although the isolates were susceptible to other antimicrobial agents, including chloramphenicol, tetracycline, and trimethoprim-sulfamethoxazole, the infections persisted for some time and required treatment with multiple antimicrobial agents.

One of the most common causes of both hospital- and community-

continued on page 3

S. aureus – *continued from page 2*

acquired infections, *S. aureus* was effectively treated with methicillin until the 1980s, when resistant strains became endemic in many hospitals. Since that time, vancomycin has been the only uniformly effective antimicrobial agent for treating serious methicillin-resistant *S. aureus* infections.

"The occurrence of two isolates of SADV within a 1-month period suggests that fully resistant strains may emerge," said Dr. Smith. "If that happens, we have a serious public health problem, because few other available antimicrobial agents can successfully treat the majority of serious *S. aureus* infections."

Dr. Smith noted that the widespread, and often unwarranted, use of antimicrobial agents is a major contributing factor in the emergence of SADV. "Studies have shown that as much as 60% of vancomycin prescriptions in hospitals is inconsistent with CDC recommendations," she said.

To prevent the spread of SADV, HIP recommends 1) strict adherence to contact isolation precautions and other recommended infection control practices, 2) judicious use of vancomycin, and 3) active surveillance for SADV. Detailed recommendations for preventing and controlling SADV were published in the *MMWR* (1997;46:626-8, 635-6) and are also available, along with additional SADV information, on HIP's website (http://www.cdc.gov/ncidod/hip/hip.htm). ■

Focus on Quarantine

Division of Quarantine monitors exotic pet importations

A little-known aspect of the mission of the Division of Quarantine (DQ) is to oversee cargo entering the United States. DQ enforces entry requirements and trains the federal inspectors who are responsible for "importations of public health importance," which include shipments of live animals or insects "known to be or suspected of being infected with any disease transmissible to humans."

Green anole

The popularity of exotic pets is increasing tremendously. Americans own an estimated 7.3 million pet reptiles; the U.S. Fish and Wildlife Service (FWS) reports that the number of imported iguanas increased almost thirty-fold, from 28,000 in 1986 to 798,000 in 1993.

The risk of acquiring *Salmonella* from reptiles is well documented. All reptiles carry *Salmonella* as part of their normal intestinal flora; it cannot be eradicated by antibiotics. Additional general public health concerns about exotic pets include physical injury from large animals (constrictors, felines, and nonhuman primates) and venomous reptiles, as well as emerging pathogens (e.g., arenaviruses and rickettsial diseases) that have the potential to be imported with rodents and their ectoparasites.

The FWS regulates and monitors importation of endangered species and animals on the "Injurious Wildlife List." The U.S. Department of Agriculture does not regulate such imports if the animals do not belong to a listed species proven to endanger U.S. livestock, and few states have regulations restricting the importation of exotic animals. The CDC-trained inspectors have authority only over importations that can affect the public health. This policy is being evaluated with an eye to risk assessment and the potential for importation of disease.

In 1996, DQ conducted a census of animals entering through Miami, the port of entry for an estimated 18% of exotic live-animal cargoes. This surveillance demonstrated that the volume of wild-caught animals entering the United States far exceeds the quantities needed to supply the nation's zoos. During the first 9 months of 1996, preliminary data indicate that almost 900,000 exotic animals were imported through Miami, including 800,000 reptiles, more than 41,000 of which are considered venomous or dangerous. DQ inspectors counted 9,938 caiman crocodiles, 2,375 reticulated pythons, 132 cobras, 313 anacondas, 593 vipers, and 39 mambas. These animals are eagerly sought by enthusiasts, who refer to them as "hot species."

Exotic pets that escape or are released into a friendly environment can establish breeding populations that may displace or threaten native animals or damage crops. In Florida, where the habitat is favorable for their survival, at least 25 exotic species have become established, including basilisks, green iguanas, and spectacled caimans. Stephanie Ostrowski, DVM, principal investigator for this surveillance project, says, "If it's different, people want it. Unfortunately, it's human nature to make impulse purchases that we later regret. Zoos are not an option for placement of these common species, and owners suffering buyer's remorse should contact their local humane society or herpetological club." ■

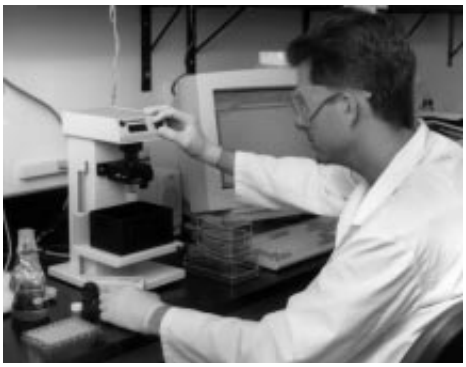
Long-nosed snake

Focus on Scientific Resources

Emerging Infectious Disease Program funds state-of-the art technology

Researchers in the Specialized Diagnostic Support group, Biological Products Branch, Scientific Resources Program (SRP) have recently obtained a research lease for the utilization of single-cell microencapsulation technology (One Cell Systems), which allows protein secretions from individual cells to be isolated and measured. The instrument was acquired with Emerging Infectious Disease (EID) Program funds as part of NCID's plan to build infrastructure to support surveillance, research, and critical laboratory diagnostic capabilities.

In this system, a derivatized gel matrix surrounding each cell functions as an analog to an antibody-coated microtitre well, capturing the protein of interest within the immediate surroundings of the cell. Because gel microdrops are extremely small (20-50 µm in diameter), encapsulated cells can be processed in bulk culture and then individually isolated by using a fluorescence-activated cell sorter (FACS), which quantifies the fluorescent signal from a specific reporter antibody. This technique can expedite the process for screening monoclonal antibodies or recombinant protein production from cells.



John Hart, SRP, using the One Cell gel microdrop encapsulation system.

The Specialized Diagnostic Support group has previously refined methods to rapidly isolate hybridoma isotype switch (IgM to IgG) mutants (see *NCID Focus*, May-June, 1997). However, with single-cell microencapsulation techniques, coupled to cell sorting by FACS, the efficacy of isolating these rare IgG-secreting hybridomas is now 1000-fold higher. By using the sort capabilities of the recently acquired FACSCaliber instrument (also procured with EID funds), the cloning can be performed in a single step, saving hundreds of laboratory hours.

Merry Liu, SRP, getting ready to sort cells on the FACS.

By combining One Cell gel microdrop encapsulation technology (which increases the microenvironment 7-million-fold) with the sort capabilities of FACS, rare individual cell secretory events can be isolated and characterized for use in specialized diagnostics and pathogenesis studies.

The Specialized Diagnostic Support group is currently consulting with NCID's SDS Advisory Group to review critical project needs and assess priorities in the arena of critical reference reagents and diagnostic products. For further information, contact Todd Parker (404-639-4095). ■

IDEA Place

Neato Mosquito

LaCrosse encephalitis, a mosquito-transmitted disease that primarily affects children under 15 years of age, has increased greatly in the mid-Atlantic and southeastern states. West Virginia reported the largest number of cases of all states — 66 in 1996. In response, the West Virginia Department of Health and Human Resources and NCID's Division of Vector-Borne Infectious Diseases have developed a number of collaborative projects.

Neato Mosquito, a curriculum resource package, is part of an educational program that was implemented in Spring 1997 in 11 schools to 327 fourth grade students. It presents information about mosquito biology, mosquitoes in the ecosystem, and mosquitoes as vectors of disease. Special emphasis is placed on ways to reduce the risk of being bitten by the mosquitoes that transmit the LaCrosse encephalitis virus (for example, removing mosquito habitats from the home and using insect repellents when playing outdoors). Support materials include overhead projector transparencies and slides, a videotape, line drawings for coloring, a craft item, crossword puzzles, and a class project. The materials can be adapted for other educational settings beyond fourth grade.

Also available are two 30-second public service announcements, a script and slide presentation for civic groups, and an educational pamphlet, *LaCrosse Encephalitis, Treehole Mosquitoes, and West Virginia Children*. Curriculum evaluation results, available from 75% of the teachers who used it, have been excellent. *Neato Mosquito* can be found on the Internet at http://www.cdc.gov/ncidod/dvbid/arborneato.htm. For more information, contact Roger Nasci (970-221-6432; E-mail, rsn0@cdc.gov) or James Herrington (970-221-6429; E-mail, jxh7@cdc.gov). ■

Focus on Parasitic Diseases

Division of Parasitic Diseases and The Carter Center collaborate in the Global 2000 River Blindness Program

A major effort to eliminate onchocerciasis (river blindness) began in 1987, when Merck & Co. licensed the drug ivermectin (Mectizan) for treatment of the disease. Ivermectin prevents the progression of the illness for about a year after a single oral dose. That same year, Merck announced that it would donate the drug for treating and preventing onchocerciasis in whatever amounts were needed, for however long it was needed. Merck also established an independent group of distinguished international scientists (the Mectizan Expert Committee), led by former CDC Director William Foege, to evaluate applications for supplies of the drug. National and international health workers in the affected countries were thus challenged to develop systems capable of distributing the orally administered drug once a year to persons in remote villages.

GRBP staff attended the unveiling of the river blindness statue at The Carter Center, November 1996.

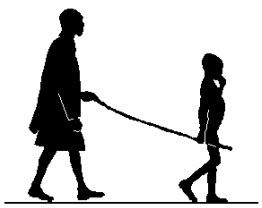
Ministries of health have enjoyed major assistance in establishing community-based distribution of Mectizan from nongovernmental development organizations (NGDOs), and their partnerships have demonstrated their flexibility, creativity, and rapid response to the challenge. The Carter Center has been one of the leading NGDOs in this global effort, with major support from the Lions Club Sight First project.

Since the donation of the drug was announced, the Division of Parasitic Diseases (DPD) (led at the time by director Robert Kaiser) has collaborated in this effort. Today, DPD houses the technical component of a new program, the Global 2000 River Blindness Program (GRBP) of The Carter Center, which has treated more than 8 million persons with ivermectin since its launching in 1996. DPD's Frank Richards serves as technical director of GRBP, with oversight by Donald Hopkins, former deputy director of CDC.

The GRBP has operations in Nigeria, Uganda, Cameroon, Sudan (as part of The Carter Center peace initiative and Guinea worm disease eradication effort there), and in all six river blindness–endemic countries in the Americas. In addition to GRBP, DPD is aiding the global initiative against river blindness through the efforts of David Addiss, CDC liaison to the Mectizan Expert Committee, and Robert Klein (Director of DPD's Medical Entomology Research and Training Unit in Guatemala City), who serves on the Program Coordinating Committee of the Onchocerciasis Elimination Program for the Americas (OEPA).

Globally, treatments with ivermectin have increased from 500,000 persons in 1988 to some 18 million in 1997. Encouraged by these successes, the World Bank launched a new $120 million program in 1995 based on ivermectin distribution (the African Program for Onchocerciasis Control [APOC]) with goals of treating the remaining 50-60 million persons at risk of onchocerciasis and eliminating onchocerciasis as a public health problem in Africa by 2007. Similarly, the OEPA, established after a resolution by the Pan American Health Organization in 1991 and aided by the InterAmerican Development Bank, also works to eliminate onchocerciasis as a public health problem in the Americas by 2007. Persons in over 95% of the known hyperendemic communities in the Americas are currently under treatment. ■

Onchocerciasis (river blindness) is a parasitic disease caused by the parasite *Onchocerca volvulus* and transmitted by blackflies that breed in rapidly flowing rivers and streams. The disease, which primarily affects residents of isolated agricultural villages situated near rivers, causes chronic eye and skin disorders. River blindness is endemic in 37 countries. About 98% of infected persons are in Africa, where the disease is most severe along the major rivers in a belt spanning the central part of the sub-Saharan portion of the continent. Outside Africa, onchocerciasis occurs in Mexico, Guatemala, Ecuador, Colombia, Venezuela, and Brazil in the Americas, and in Yemen in the Middle East. The World Health Organization (WHO) estimates that 123 million people are at risk of contracting onchocerciasis, and that between 17 and 18 million persons are infected, of whom about 270,000 are blind and another 500,000 are severely visually impaired.



Focus on Vector-Borne Infectious Diseases

DVBID awarded grant to assess risk perceptions of vector-borne infectious diseases

A proposal submitted by the Division of Vector-Borne Infectious Diseases (DVBID) was recently selected for funding by the National Science Foundation's 1997-1998 Practicum Survey of the Joint Program in Survey Methodology (JPSM). DVBID will provide input to JSPM, which will then survey the U.S. adult population regarding risk perceptions of emerging vector-borne diseases.

The treehole mosquito, Aedes triseriatus*, transmits LaCrosse encephalitis virus.*

All federal government agencies were eligible to submit proposals to use the 1997-1998 JPSM survey practicum to investigate issues of importance to their missions. This is a collaborative effort between the Federal Statistical System and JPSM (based at the University of Maryland and the University of Michigan), which provides to the agency selected a survey data set on a topic of interest.

The DVBID study offers a unique opportunity to conduct seminal investigative work in the field of knowledge, attitudes, practices, and risk perceptions regarding infectious diseases transmitted by mosquitoes, ticks, and fleas, such as arboviral encephalitis, Lyme disease, and plague. The results of the survey will be beneficial to CDC, as well as to government policymakers, university and private researchers, and state and local health educators.

The National Science Foundation will provide $30,000 for the 1997-1998 practicum year, with the balance coming from the sponsoring agency. In previous years, funds have permitted a national sample of 1,500 households, selected by random digit dialing, to be surveyed in 10- to 15-minute interviews. James Herrington, public health education specialist, DVBID, is coordinating this activity; he can be reached by phone, 970-221-6429, and E-mail, jxh7@cdc.gov. ■

NEWS BRIEFS

DVRD group to be named WHO center

The World Health Organization (WHO) and the Pan American Health Organization (PAHO) have proposed designating the Viral Gastroenteritis Section (VGS), Division of Viral and Rickettsial Diseases, as a PAHO/WHO Collaborating Center for Rotavirus and the Agents of Viral Gastroenteritis. Under the leadership of VGS Chief Roger Glass, DVRD's new WHO center will conduct evaluations of rotavirus vaccines, serve as a vaccine evaluation training center, provide assistance in characterization and referencing of virus strains, and provide reference strains and assistance for new diagnostic methods. According to DVRD Director Brian Mahy, "The proposed designation of the new WHO collaborating center recognizes the exceptional work of Dr. Glass and his colleagues in controlling and preventing viral gastroenteritis worldwide."

CFS webcast on Internet

"Chronic Fatigue Syndrome — Current Issues," a 2-hour video program on CFS epidemiology, research, diagnosis, and patient management, was broadcast live from CDC in late September and is available for viewing on the Internet until March 22, 1998. The program, the first CDC-sponsored "webcast," can be accessed at http://www.tstradio.com/cfsids.

Focus on Global Health

Gore-Chernomyrdin Commission

The Gore-Chernomyrdin Commission offers leaders of the United States and Russia a forum in which to collaborate on topics of mutual interest and concern. Health is one of the commission's nine work areas. In September, a delegation headed by Secretary Shalala met with her counterpart, Minister of Health Dimitrieva, in Moscow to discuss recent advances in our collaborations on health.

Infectious diseases are a priority area of the commission. Both NCID and NIP have worked closely with our Russian colleagues to address the recent outbreak of diphtheria in Russia and the adjacent newly independent states. The outbreak has been controlled through a massive vaccination campaign.

The American International Health Alliance has worked with CDC, the Society for Health Care Epidemiology of America, and the Russian Ministry of Health to improve the quality and efficiency of health care services by establishing model regional infection control training centers, assisting ministry officials in reviewing existing policies and regulations, and upgrading microbiologic laboratory services.

A new area of collaboration was agreed upon: to address the growing threat of HIV and sexually transmitted diseases. Five pilot projects are underway with former military laboratories to help the Russian government redirect these valuable resources to solve public health problems.

James LeDuc
Associate Director for Global Health
NCID

NCID Summer Research Fellows Program

This past summer, the NCID Summer Research Fellowship welcomed its ninth and largest class — 29 African American, Asian American, Hispanic, and American Indian students from medical, veterinary, and pharmacy doctoral programs. The goal of the unique program, which began as a joint venture between the Minority Health Professions Foundation (MHPF) and NCID in 1988, is to increase the pool of minority health professionals interested in infectious disease prevention research and public health.

Competition for positions in the class of 1997 was keen; less than 40% of applicants were accepted. Most participants were honor students at their institutions.

This year, for the first time, students conducted research in the Arctic Investigations Program in Anchorage, Alaska, and in the Scientific Resources Program and served again in the Dengue and Bacterial Zoonoses Branches of the Division of Vector-Borne Infectious Diseases (DVBID) in Puerto Rico and Colorado and in the Divisions of Bacterial and Mycotic Diseases, Viral and Rickettsial Diseases (DVRD), Parasitic Diseases, and AIDS, STD, and TB Laboratory Research.

Veterinary student Fernando Torres and his mentor, José Rigau, Dengue Branch, DVBID, San Juan, PR.

Among projects, the students designed and evaluated novel laboratory diagnostic methods; isolated and characterized genes encoding pathogen proteins; performed molecular analyses of drug-resistant fungi; conducted epidemiologic studies of infectious diseases in South Africa, Puerto Rico, Alaska and other U.S. populations; and developed an Internet home page for viral hemorrhagic fever.

The fellows also participated in group interviews with NCID staff, surveys of career opportunities at NCID, informal discussions on the role of infectious disease prevention in minority communities, as well as instruction in oral and written communication and research methodology.

Consuelo M. Beck-Sagué, NCID's Associate Director of Minority and Women's Health, and mentor for four of this year's NCID Summer Research Fellows, noted, "The Statement of Principles from the American College of Epidemiology challenges us 'to achieve in the profession of epidemiology racial, ethnic and cultural diversity, at all levels, in order to contribute fully to public health for all populations.' Many minority health professionals, however, come to health professions school with the idea that 'giving back' to your community is serving in primary care in those communities. Research is considered 'going after your own thing.' To reach minority students in the health professions before they have permanently written off research and have them see that public health is also giving back—that's what we are trying to do in this fellowship."

Most mentors evaluated their students as "excellent" or "outstanding." In turn, most students rated their summer at CDC as an excellent experience, and four have already obtained applications to return for the Senior Epidemiology Elective (a 6-week rotation for senior medical and veterinary students).

Judith Carey, doctor of pharmacy student, applies molecular techniques to enterovirus diagnostics and characterization; her mentor was M. Steven Oberste, DVRD.

Work is in already under way for next year's fellowships. Project Officer Edith Hambie is creating, in collaboration with MHPF staff, a mentor's manual to provide guidance for NCID staff who participate in this program.

Recruitment of applicants has begun at MHPF schools (Howard, Meharry, Charles Drew, and Morehouse Schools of Medicine; Tuskeegee School of Veterinary Science; Xavier, Texas Southern, Florida A & M Universities' Doctor of Pharmacy Programs) and Hispanic and American Indian/Alaska Native University Centers of Excellence.

To help evaluate the program, the approximately 150 students who have participated are being surveyed; the results will help the fellowship improve in fulfilling its mission of bringing minority health professions students to public health. ■

News Makers

Awards

Martha Alexander, public health analyst in DASTLR's Hematologic Diseases Branch, Hemophilia Program, received the Sarah Mazelis Award for outstanding practice in health education from the APHA Public Health Education and Health Promotion Section in Indianapolis in November.

Peter Schantz (DPD) was named the first Public Health Service (PHS) Commissioned Officer Veterinarian of the Year. Dr. Schantz (R) is shown accepting the award from Assistant Surgeon General Michael Blackwell, PHS Chief Veterinarian, at a ceremony in Bethesda, Md., on October 22. Dr. Schantz was cited for his contributions to the epidemiology and control of zoonotic diseases, for promoting the role of veterinary medicine and its perspective on improving public health, and for helping to expand opportunities for veterinarians at CDC.

Staff Changes

Elaine Ashley has joined the Entomology Branch, DPD, as its secretary. She transferred to CDC from the U.S. Fish and Wildlife Service in Atlanta.

Anita Blankenship has joined DPD as the Epidemiology Branch secretary. Previously she was with Ft. Lewis Army Base in Tacoma, Washington.

Elamin Elbasha has joined NCID as a Prevention Effectiveness Fellow working in the area of the economics of antimicrobial resistance. Dr. Elbasha comes to CDC from the International Livestock Research Institute in Nairobi, Kenya.

Barbara Govert is DBMD's new health communications specialist. She was previously a public affairs officer for the U.S. Army and will become the chief of NCID's first division-level office of health communication.

Walter Hierholzer, professor of infectious diseases and epidemiology at Yale University School of Medicine, has joined NCID for 1 year as senior advisor to the director. Dr. Hierholzer was previously chair of the Hospital Infection Control Practices Advisory Committee (HICPAC) and a member of NCID's Board of Scientific Counselors.

INSIDE

Pamela Patterson has joined the Entomology Branch, DPD, as a biologist. She had been working for 5 years in the DPD Immunology Branch as a guest researcher from Emory University.

Sharon Richardson has joined DPD as the new administrative officer. Sharon was previously working with the National Immunization Program and formerly held positions within NCID.

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